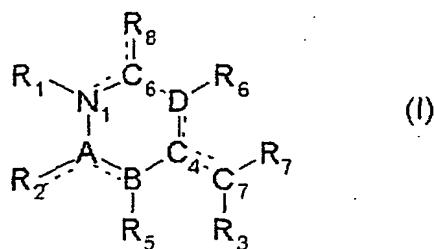


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- 73 -

ART 34 AMDT CLAIMS

1. A compound corresponding to general formula (I)



5

in which:

A represents C or N,

B and D, which may be identical or different, are chosen from N or C, with the proviso that A and B do 10 not simultaneously represent a nitrogen atom,

R₁ represents

- either a hydrogen atom,
- or a (C₁-C₁₂)alkyl, (C₃-C₆)cycloalkyl, (C₆-C₁₈)aryl, (C₆-C₁₈)aryl(C₁-C₄)alkyl, (C₁-C₁₂)alkyl(C₆-C₁₈)aryl, 15 (C₂-C₈)alkenyl, (C₂-C₈)alkynyl, (C₁-C₈)alkoxy or hydroxyl group,
- or an aromatic or nonaromatic (C₅-C₁₈)heterocycle containing from 1 to 3 hetero atoms and being attached directly to the nitrogen atom in the 20 1-position by means of a single bond or by means of a (C₁-C₆)alkyl, (C₂-C₆)alkenyl or (C₂-C₆)alkynyl group,
- or a group NR'R'' or NHCOR'R'', R' and R'', independently of one another, being chosen from a 25 hydrogen atom, (C₁-C₆)alkyl, (C₃-C₆)cycloalkyl and (C₆-C₁₂)aryl groups, and aromatic or nonaromatic (C₅-C₁₂)heterocycles containing from 1 to 3 hetero atoms;

R₂ and R₃, which may be identical or different, each 30 represent

- either a hydrogen atom,
- or a halogen atom,
- or a group: (C₁-C₆)alkoxy, (C₁-C₁₀)alkyl, (C₁-C₆) -

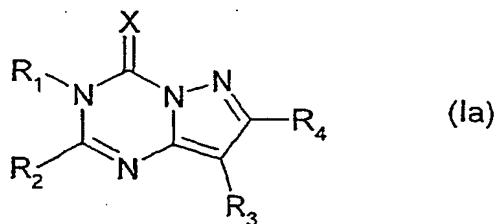
alkylCOOH, (C₁-C₆)alkylCOONa, perfluoro(C₁-C₆)-alkyl, (C₃-C₆)cycloalkyl, acyl, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₆-C₁₈)aryl, (C₆-C₁₈)arylCOOH, (C₆-C₁₈)arylCOONa, (C₆-C₁₈)aryl(C₁-C₄)alkyl, (C₁-C₆)-alkyl(C₆-C₁₈)aryl, (C₅-C₁₈)heteroaryl, (C₁-C₆)alkyl-(C₅-C₁₈)heteroaryl, (C₂-C₆)alkenyl(C₅-C₁₈)heteroaryl, (C₂-C₆)alkynyl(C₅-C₁₈)heteroaryl, CH(OH)(C₆-C₁₈)aryl, CO(C₆-C₁₈)aryl, (CH₂)_nCONH-(CH₂)_m-(C₆-C₁₈)aryl, (CH₂)_nSO₂NH-(CH₂)_m-(C₆-C₁₈)aryl or (CH₂)_nCONH-CH(COOH)-(CH₂)_p-(C₆-C₁₈)aryl with n = 1 to 4, m = 0 to 3 and p = 0 to 2, in which one or more groups -CH₂- can be optionally replaced with -O-, -S-, -S(O)-, -S(O)₂- or -NH-, and can be optionally substituted with one or more radicals chosen from the following radicals: (C₁-C₆)alkyl, hydroxyl, oxo, (C₆-C₁₈)aryl(C₁-C₈)alkyl, (C₆-C₁₈)aryl, halogen, cyano, phosphate, alkylphosphate, nitro, alkoxy, (C₅-C₁₈)heteroaryl, (C₅-C₁₈)heteroaryl(C₁-C₆)alkyl, COOH, CONR_xR_y, NR_xCONHR_y, OR_x, SR_x, SOR_x, SO₂R_x, COR_x, COOR_x, NR_xSO₂R_y or NR_xR_y in which (i) R_x and R_y, independently of one another, are chosen from a hydrogen atom and the following groups: (C₁-C₆)-alkyl, (C₃-C₆)cycloalkyl, (C₆-C₁₈)aryl, (C₆-C₁₈)aryl-(C₁-C₄)alkyl, (C₁-C₁₂)alkyl(C₆-C₁₈)aryl, (C₃-C₆)-cycloalkyl(C₆-C₁₂)aryl, (C₁-C₆)alkoxy(C₁-C₆)alkyl, (C₅-C₁₂)heteroaryl containing 1 to 3 hetero atoms, OR', NR'R" and NHCOR'R", R' and R", independently of one another, being chosen from a hydrogen atom, (C₁-C₆)alkyl, (C₃-C₆)cycloalkyl and (C₆-C₁₂)aryl groups, and aromatic or nonaromatic (C₅-C₁₂)heterocycles containing 1 to 3 hetero atoms, or (ii) R_x and R_y together form a linear or branched hydrocarbon-based chain having from 2 to 6 carbon atoms, optionally containing one or more double bonds and/or optionally interrupted with an oxygen, sulfur or nitrogen atom, - or a nitro, cyano, OR_x, SR_x, SOR_x, SO₂R_x, COR_x, CONR_xR_y, COOR_x, NR_xCOR_y, NR_xSO₂R_y or NR_xR_y group in which R_x and R_y are as defined above,

- it being understood that, in the definition of the groups R₂ and R₃, the "aryl" groups can be replaced with aromatic or nonaromatic C₄-C₁₀ "heterocycles" containing from 1 to 3 hetero atoms;
- 5 R₅ represents
 - either a hydrogen atom,
 - or a group: (C₁-C₆)alkyl, (C₃-C₆)cycloalkyl (C₆-C₁₂)aryl, or (C₅-C₁₂)heteroaryl containing 1 to 3 hetero atoms;
- 10 R₆ and R₇ form, together with the atoms which carry them, a 5- or 6-membered ring which may contain another hetero atom chosen from the group consisting of N, O and S, and in which
 - if the bond between N₁ and C₆ is a single bond, then the bond between C₆ and R₈ is a double bond and R₈ = X, where X represents either an oxygen or sulfur atom, or a group NR_x in which R_x is as defined above,
 - if the bond between N₁ and C₆ is a double bond, then the bond between C₆ and R₈ is a single bond and R₈ = Y where Y represents either a halogen atom, or a (C₁-C₆)alkyl, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₁-C₆)alkoxy, (C₃-C₆)-cycloalkyl, OR_x, SR_x, SOR_x, SO₂R_x, NR_xCOR_y, NR_xSO₂R_y or NR_xR_y group in which R_x and R_y are as defined above and R₁ is not present,
- 15 if the bond between A and B is a single bond, then the bond between A and R₂ is a double bond and R₂ = X where X is as defined above, and
 - if the bond between A and B is a double bond, then the bond between A and R₂ is a single bond, R₂ is as defined above and R₅ is not present,
 - if the bond between C₄ and D is a single bond, then the bond between C₄ and C₇ is a double bond,
 - if the bond between C₄ and D is a double bond, then the bond between C₄ and C₇ is a single bond, and D is a carbon atom, or else D is a nitrogen atom and R₆ is not present,
- 20 and it being understood that, when, in formula (I), the fused 5-membered ring is an imidazole, A is a carbon atom and B is a nitrogen atom, then C₄ can be replaced
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- 30
- 35

with a nitrogen atom so that the 6-membered ring thus formed is a 1,2,4-triazine and the bicyclic thus formed is an imidazotriazine,

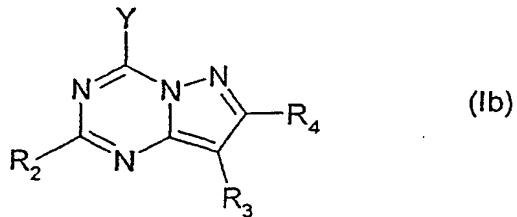
X, Y, R₂ and R₃ having the same meaning as above,

5 its tautomeric forms, its isomers, diastereoisomers and enantiomers, its prodrugs, its bioprecursors and its pharmaceutically acceptable base or acid addition salts, with the proviso that, when the compound corresponds to formula (Ia),



10

or (Ib)



then

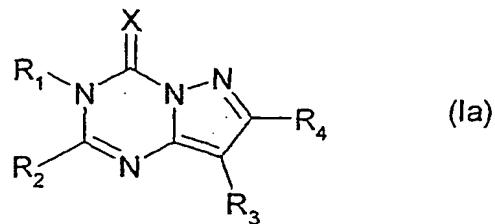
- when Y, in formula (Ib), represents OR_x, then R_x is necessarily different from aryl and aralkyl;
- when simultaneously, in formula (Ib), Y represents NR_xR_y and R_x represents H, then R_y is necessarily different from aryl and aralkyl;
- when Y, in formula (Ib), represents a group NR_xR_y in which at least one of the groups R_x or R_y is chosen from optionally substituted phenyl or pyridyl groups, then R₃ is different from a (C₁-C₁₀)alkyl, (C₂-C₁₀)alkenyl, (C₂-C₁₀)alkynyl, (C₃-C₈)cycloalkyl and (C₃-C₆)cycloalkyl(C₁-C₄)alkyl group, it being possible for the latter to be optionally substituted;
- when R₃, in formula (Ib), represents an optionally substituted phenyl or pyridyl group, then Y is different from: NHCH(CH₂CH₂OMe)(CH₂OMe), NHCH(Et)₂, 2-ethylpiperid-1-yl, cyclobutylamino,

- N(Me)CH₂CH=CH₂, N(Et)CH₂CH=CH₂, N(Me)CH₂cPr,
N(Et)CH₂cPr, N(Pr)CH₂cPr, N(Me)Pr, N(Me)Et,
N(Me)Bu, N(Me)propargyl, N(Et)propargyl,
NHCH(CH₃)CH(CH₃)CH₃, N(CH₂CH₂OMe)CH₂CH=CH₂,
5 N(CH₂CH₂OMe)Me, N(CH₂CH₂OMe)Et, N(CH₂CH₂OMe)Pr,
N(CH₂CH₂OMe)CH₂cPr, NHCH(CH₃)CH₂CH₃, NHCH(cPr)₂,
N(CH₂CH₂OMe)₂, N(Et)₂ and cyclobutylamino;
- 10 - when R₃, in formula (Ib), represents a phenyl, naphthyl, pyridyl, pyrimidyl, triazinyl, furanyl, thienyl, benzothienyl, benzofuranyl, 2,3-dihydrobenzofuranyl, 2,3-dihydrobenzothienyl, indanyl, 1,2-benzopyranyl, 3,4-dihydro-1,2-benzopyranyl or tetralinyl group, then R₁ in formula (Ia) is different from H;
- 15 - when simultaneously, in formula (Ib), R₃ represents a heterocycle directly attached at the 8-position of the pyrazolotriazine ring, R₂ represents alkyl or hydrogen, and Y represents a group NR_xR_y, R_x being chosen from a hydrogen atom or an alkyl group, then R_y is different from H or from an alkyl, alkanoyl, carbamoyl or N-alkyl-carbamoyl group;
- 20 - when NR_xR_y, in formula (Ib), represents an NH₂ group or a group NH(C₁-C₄)alkyl, then R₄ is different from a hydrogen atom or a C₁-C₄ alkyl group;
- 25 - when simultaneously, in formula (Ib), Y represents NHCH₃, R₂ represents CH₃ and R₄ represents a hydrogen atom, then R₃ is different from benzyl, phenyl, naphthyl, (2-naphthyl)methyl, pentyl, benzoyl, propyne, penten-1-yl, 2-furyl, 2-thienyl, 2-chlorophenyl, 3-acetylphenyl, 3-nitrophenyl, 3-trifluoromethylphenyl, 2-benzo[b]furyl, 2-benzo-[b]thienyl, 2-chlorobenzoyl, 2-methylaminobenzoyl,
- 30 35 4-methoxybenzoyl, 3-trifluoromethylbenzoyl, furfuryl, (3-furyl)methyl, (2-thienyl)methyl, 2-hydroxypropyl, iodo, nitro, acetylamino, benzoylamino and diethylaminocarbonyl;
- when simultaneously, in formula (Ib), Y represents

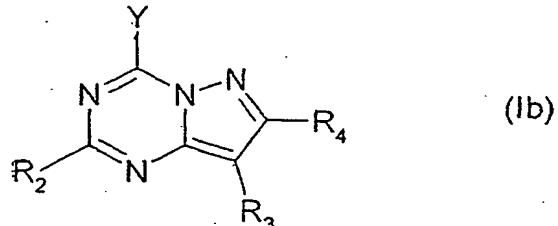
- NHCH₃, R₄ represents H and R₃ represents benzoyl or iodo, then R₂ is different from methyl, ethyl, n-propyl, n-butyl, thiomethyl, methoxymethyl, phenyl and 2-furyl;
- 5 - when simultaneously, in formula (Ib), Y represents NHCH₃, R₄ represents H and R₃ represents benzyl or 2-methoxybenzyl, then R₂ is different from methyl, n-propyl and trifluoromethyl;
- 10 - when simultaneously, in formula (Ib), Y represents a methylamino, benzylamino, pyrrolidinyl, dimethylamino or 1-piperazinyl group and R₂ represents methyl or n-propyl, then R₃ is different from iodo and benzoyl;
- 15 - when R₄, in formula (Ib), is a 2-furyl group, then R₃ is different from a hydrogen atom or from a (C₁-C₄) alkyl group;
- 20 - when simultaneously, in formulae (Ia) and (Ib), R₁ is a hydrogen atom with R₂ chosen from CH₃, C₂H₅ or C₆H₅, R₃ is chosen from H, C₆H₅, (m)CH₃C₆H₄, CN, COOEt, Cl, I or Br, and R₄ represents H, C₆H₅, (o)CH₃C₆H₄ or (p)CH₃OC₆H₄, then Y is different from H, OH, CH₃, C₂H₅, C₆H₅, n-C₃H₇, iso-C₃H₇, SH, SCH₃, NH(n-C₄H₉) or N(C₂H₅)₂ and X is different from O;
- 25 - when simultaneously, in formula (Ib), R₁ represents H, R₃ represents Br or H, and R₂ is chosen from H, CH₃ or SCH₃ with R₄ being C₆H₅ or H, then Y is different from SCH₃, NH(n-Pr), NH(n-Bu), N(Et)₂, piperidyl, OH, SH, O(i-Pr), CH₃, SEt, OCH₃ and O(n-Pr);
- 30 - when simultaneously, in formula (Ib), R₂ represents CF₃, CH₃OCH₂-, Ph, Et, n-Pr or CH₃, Y represents NHCH₃, N(CH₃)₂ or N(CH₃)Ph, and R₄ = H or CH₃, then R₃ is different from β-D-glycero-pento-furan-3'-ulos-1'-yl, 2'-deoxy-β-D-ribofuranosyl, 2'-deoxy-β-D-xylofuranosyl, 2'-deoxy-β-D-ribo-furanosyl-3',5'-bis(dibenzyl phosphate), cyclic benzyl 2'-deoxy-β-D-xylofuranosyl-3',5'-phosphate, 2'-deoxy-β-D-ribofuranosyl-3',5'-bisphosphate and cyclic 2'-deoxy-β-D-xylofuranosyl-3',5'-phosphate.
- 35

2. A compound as claimed in claim 1, corresponding to formula (I), characterized in that A is a carbon atom, and B and D are nitrogen atoms, the 6-membered heterocycle thus formed being a triazine, or A represents a nitrogen atom and B and C represent carbon atoms, the 6-membered heterocycle thus formed being a pyridazine.

5 3. A compound as claimed in either one of claims 1
10 and 2, corresponding to formula (Ia),



or to formula (Ib),



15 characterized in that R₁, R₂, R₃, X and Y are as defined in claim 1 and
R₄ represents:

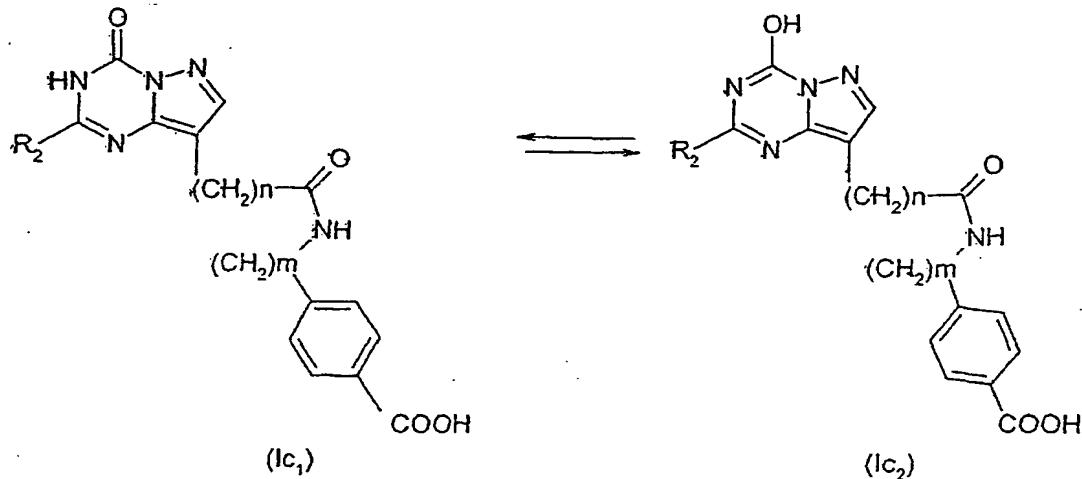
- either a hydrogen atom, a (C₁-C₁₂)alkyl, (C₃-C₆)cycloalkyl, (C₆-C₁₈)aryl, (C₆-C₁₈)aryl-(C₁-C₄)alkyl or (C₁-C₁₂)alkyl(C₆-C₁₈)aryl group, or
20 an aromatic or nonaromatic (C₅-C₁₈)heterocycle containing 1 to 3 hetero atoms, in which one or more groups -CH₂- can be optionally replaced with -O-, -S-, -S(O)-, -S(O)₂- or -NH-, and can be optionally substituted with one or more radicals chosen from (C₁-C₆)alkyl, hydroxyl, oxo, halogen, cyano, nitro and alkoxy radicals,
- or a group NR'R'' or NHCOR'R'', R' and R'', independently of one another, being chosen from a hydrogen atom, a (C₁-C₆)alkyl, (C₃-C₆)cycloalkyl or

- (C₆-C₁₂) aryl group, and an aromatic or nonaromatic (C₅-C₁₂) heterocycle containing from 1 to 3 hetero atoms, it being possible for said formulae (Ia) and (Ib) to be, with respect to one another, tautomeric forms according to the definition of R₁, of X and of Y, with the proviso that:
- when Y, in formula (Ib), represents OR_x, then R_x is necessarily different from aryl and aralkyl;
 - when simultaneously, in formula (Ib), Y represents NR_xR_y and R_x represents H, then R_y is necessarily different from aryl and aralkyl;
 - when Y, in formula (Ib), represents a group NR_xR_y in which at least one of the groups R_x or R_y is chosen from optionally substituted phenyl or pyridyl groups, then R₃ is different from a (C₁-C₁₀) alkyl, (C₂-C₁₀) alkenyl, (C₂-C₁₀) alkynyl, (C₃-C₈) cycloalkyl and (C₃-C₆) cycloalkyl(C₁-C₄) alkyl group, it being possible for the latter to be optionally substituted;
 - when R₃, in formula (Ib), represents an optionally substituted phenyl or pyridyl group, then Y is different from: NHCH(CH₂CH₂OMe)(CH₂OMe), NHCH(Et)₂, 2-ethylpiperid-1-yl, cyclobutylamino, N(Me)CH₂CH=CH₂, N(Et)CH₂CH=CH₂, N(Me)CH₂cPr, N(Et)CH₂cPr, N(Pr)CH₂cPr, N(Me)Pr, N(Me)Et, N(Me)Bu, N(Me)propargyl, N(Et)propargyl, NHCH(CH₃)CH(CH₃)CH₃, N(CH₂CH₂OMe)CH₂CH=CH₂, N(CH₂CH₂OMe)Me, N(CH₂CH₂OMe)Et, N(CH₂CH₂OMe)Pr, N(CH₂CH₂OMe)CH₂cPr, NHCH(CH₃)CH₂CH₃, NHCH(cPr)₂, N(CH₂CH₂OMe)₂, N(Et)₂ and cyclobutylamino;
 - when simultaneously, in formula (Ib), Y represents a methylamino, benzylamino, pyrrolidinyl, dimethylamino or 1-piperazinyl group and R₂ represents methyl or n-propyl, then R₃ is different from iodo and benzoyl;
 - when R₃, in formula (Ib), represents a phenyl, naphthyl, pyridyl, pyrimidyl, triazinyl, furanyl, thienyl, benzothienyl, benzofuranyl, 2,3-dihydrobenzofuranyl, 2,3-dihydrobenzothienyl, indanyl,

- 1,2-benzopyranyl, 3,4-dihydro-1,2-benzopyranyl or tetralinyl group, then R₁ in formula (Ia) is different from H;
- 5 - when simultaneously, in formula (Ib), R₃ represents a heterocycle directly attached at the 8-position of the pyrazolotriazine ring, R₂ represents alkyl or hydrogen, and Y represents a group NR_xR_y, R_x being chosen from a hydrogen atom or an alkyl group, then R_y is different from H or
- 10 from an alkyl, alkanoyl, carbamoyl or N-alkyl-carbamoyl group;
- 15 - when NR_xR_y, in formula (Ib), represents an NH₂ group or a group NH(C₁-C₄)alkyl, then R₄ is different from a hydrogen atom or a C₁-C₄ alkyl group;
- 20 - when simultaneously, in formula (Ib), Y represents NHCH₃, R₂ represents CH₃ and R₄ represents a hydrogen atom, then R₃ is different from benzyl, phenyl, naphthyl, (2-naphthyl)methyl, pentyl, benzoyl, propyne, penten-1-yl, 2-furyl, 2-thienyl, 2-chlorophenyl, 3-acetylphenyl, 3-nitrophenyl, 3-trifluoromethylphenyl, 2-benzo[b]furyl, 2-benzo-[b]thienyl, 2-chlorobenzoyl, 2-methylaminobenzoyl, 4-methoxybenzoyl, 3-trifluoromethylbenzoyl,
- 25 furfuryl, (3-furyl)methyl, (2-thienyl)methyl, 2-hydroxypropyl, iodo, nitro, acetylamino, benzoylamino and diethylaminocarbonyl;
- 30 - when simultaneously, in formula (Ib), Y represents NHCH₃, R₄ represents H and R₃ represents benzoyl or iodo, then R₂ is different from methyl, ethyl, n-propyl, n-butyl, thiomethyl, methoxymethyl, phenyl and 2-furyl;
- 35 - when simultaneously, in formula (Ib), Y represents NHCH₃, R₄ represents H and R₃ represents benzyl or 2-methoxybenzyl, then R₂ is different from methyl, n-propyl and trifluoromethyl;
- when simultaneously, in formula (Ib), Y represents a methylamino, benzylamino, pyrrolidinyl, dimethylamino or 1-piperazinyl group and R₂

- represents methyl or n-propyl, then R₃ is different from iodo and benzoyl;
- when R₄, in formula (Ib), is a 2-furyl group, then R₃ is different from a hydrogen atom or from a (C₁-C₄)alkyl group;
 - when simultaneously, in formulae (Ia) and (Ib), R₁ is a hydrogen atom with R₂ chosen from CH₃, C₂H₅ or C₆H₅, R₃ is chosen from H, C₆H₅, (m)CH₃C₆H₄, CN, COOEt, Cl, I or Br, and R₄ represents H, C₆H₅, (o)CH₃C₆H₄ or (p)CH₃OC₆H₄, then Y is different from H, OH, CH₃, C₂H₅, C₆H₅, n-C₃H₇, iso-C₃H₇, SH, SCH₃, NH(n-C₄H₉) or N(C₂H₅)₂ and X is different from O;
 - when simultaneously, in formula (Ib), R₁ represents H, R₃ represents Br or H, and R₂ is chosen from H, CH₃ or SCH₃ with R₄ being C₆H₅ or H, then Y is different from SCH₃, NH(n-Pr), NH(n-Bu), N(Et)₂, piperidyl, OH, SH, O(i-Pr), CH₃, SEt, OCH₃ and O(n-Pr);
 - when simultaneously, in formula (Ib), R₂ represents CF₃, CH₃OCH₂-, Ph, Et, n-Pr or CH₃, Y represents NHCH₃, N(CH₃)₂ or N(CH₃)Ph, and R₄ = H or CH₃, then R₃ is different from β-D-glycero-pento-furan-3'-ulos-1'-yl, 2'-deoxy-β-D-ribofuranosyl, 2'-deoxy-β-D-xylofuranosyl, 2'-deoxy-β-D-ribo-furanosyl-3',5'-bis(dibenzyl phosphate), cyclic benzyl 2'-deoxy-β-D-xylofuranosyl-3',5'-phosphate, 2'-deoxy-β-D-ribofuranosyl-3',5'-bisphosphate and cyclic 2'-deoxy-β-D-xylofuranosyl-3',5'-phosphate.
4. A compound as claimed in any one of claims 1 to 3, characterized in that:
- R₁ represents either a hydrogen atom or a (C₁-C₁₂)alkyl group,
- R₂ represents either a hydrogen or sulfur atom, or a (C₁-C₆)alkyl group, or a trifluoro(C₁-C₆)alkyl group, or an amino group, or a group SR_x where R_x is as defined above,
- R₃ represents either a hydrogen atom, or a halogen atom, or a nitro, (C₁-C₆)alkyl, trifluoro(C₁-C₆)alkyl,

- acyl, -(C₂-C₆) alkenyl, (C₂-C₆) alkynyl, (C₆-C₁₈) aryl, (CH₂)_nCONH-(CH₂)_maryl, (CH₂)_nSO₂NH-(CH₂)_maryl or (CH₂)_nCONH-CH(COOH)-(CH₂)_paryl group with n = 1 to 4, m = 0 to 3 and p = 0 to 2, or a group NR'R'' or NHCOR'R'', R' and R'', independently of one another, being chosen from a hydrogen atom, (C₁-C₆) alkyl, (C₃-C₆) cycloalkyl and (C₆-C₁₂) aryl groups, and aromatic or nonaromatic (C₅-C₁₂) heterocycles containing 1 to 3 hetero atoms,
- 10 R₄ represents a hydrogen atom, X represents an oxygen or sulfur atom, and Y represents either a halogen atom, or a (C₁-C₆) alkyl, (C₂-C₆) alkynyl, phenyl, OR_x, SR_x or NR_xR_y group in which R_x and R_y are as defined above.
- 15 5. A compound as claimed in any one of claims 1 to 4, characterized in that:
- R₁ represents a hydrogen atom or a methyl group, R₂ represents a hydrogen or sulfur atom, or a methyl, 20 propyl, trifluoromethyl, amino or thiomethyl group, R₃ represents an iodine atom, or an amino, nitro, acyl-amino, benzyl, 2-methoxybenzyl, furfuryl, 3-furylmethyl, 2-thienylmethyl, 3-thienylmethyl, 2-pyridylmethyl, 2-chlorobenzoyl -CH₂CH₂COOH, 25 CH₂CH₂COONa, C₆H₄COOH, C₆H₄COONa, C₆H₄COOC₂H₅, ethyl benzoate, sodium benzoate, CH₂=CHCOOC₂H₅, propyn-1-yl, (CH₂)₂CONH-C₆H₄COONa, (CH₂)CONH-(CH₂)₂-indole, (CH₂)₂CONH-CH(COOH) (CH₂) indole, (CH₂)CONH-(CH₂)₂C₆H₄OH or (CH₂)₂CONH-CH₂C₆H₄OH group,
- 30 X represents an oxygen atom, and Y represents an OH, SH, N-methyl-N-phenylamino (NPhCH₃), N-methyl-N-(4-acylaminophenyl)amino or triazole group.
- 35 6. A compound as claimed in any one of claims 1 to 5, characterized in that it corresponds to formulae (Ic₁) and (Ic₂)



in which n = 1 to 4, and m = 0 to 2, preferably R₂ represents a hydrogen atom, n = 2 and m = 0, and also its prodrugs, its bioprecursors and its pharmaceutically acceptable base or acid addition salts.

7. A compound as claimed in claim 6, characterized in that R₂ represents a hydrogen atom, n = 1 to 2 and m = 0.

8. Sodium 4-[[1-(oxo)-3-(4-oxopyrazolo[1,5-a]-1,3,5-triazin-8-yl)propyl]amino]benzoate.

9. A compound as claimed in any one of claims 1 to 5, characterized in that Y represents a methylamino or cyclopropylamino group, R₂ represents an iodine or sulfur atom, or a methyl, propyl, cyclopropyl, perfluoroethyl, perfluoropropyl, trifluoromethyl, allyl, trifluoromethylvinyl, vinyl, 1-propynyl or ethynyl group, R₃ is chosen from an iodine atom, and a benzyl, 2-methoxybenzyl, 2-fluorobenzyl, 2-bromobenzoyl, furfuryl, 2-furylcarbonyl, 3-furylmethyl, 2-thienylmethyl, 3-thienylmethyl, 2-pyridylmethyl, 2-chlorobenzoyl, cyclopentyl or cyclohexyl group, and R₄ represents a hydrogen or fluorine atom.

10. A compound as claimed in claim 3, characterized in

that X represents an oxygen atom, Y represents an OH or NH₂ group, R₁ represents a hydrogen atom or optionally an alkyl group having from 1 to 3 carbons, R₃ represents a hydrogen atom or a substituted benzyl group, and R₄ represents a hydrogen or fluorine atom.

11. A compound as claimed in any one of claims 1 to 10, characterized in that it is chosen from the group consisting of the following compounds:
- 10 8-Iodo-4-(N-methyl-N-phenylamino)pyrazolo[1,5-a]-1,3,5-triazine.
8-Iodo-4-[N-methyl-N-(4-nitrophenyl)amino]pyrazolo-[1,5-a]-1,3,5-triazine.
8-Iodo-4-(triazol-4-yl)pyrazolo[1,5-a]-1,3,5-triazine.
- 15 8-Acetamido-2-methylpyrazolo[1,5-a]-1,3,5-triazin-4-one.
Methyl 4-[(hydroxy) [4-(N-methyl-N-phenylamino)-pyrazolo[1,5-a]-1,3,5-triazin-8-yl]methyl]benzoate.
8-[(2-Chlorophenyl) (hydroxy)methyl]-4-(N-methyl-N-phenylamino)-2-n-propylpyrazolo[1,5-a]-1,3,5-triazine.
- 20 8-(2-Chlorophenyl)-4-(N-methyl-N-phenylamino)-2-n-propylpyrazolo[1,5-a]-1,3,5-triazine.
8-(2-Chlorophenyl)-4-(N-methylamino)-2-n-propylpyrazolo[1,5-a]-1,3,5-triazine.
- 25 Ethyl 3-[4-(N-methyl-N-phenylamino)pyrazolo[1,5-a]-1,3,5-triazin-8-yl]acrylate.
Ethyl 3-[4-(N-methyl-N-phenylamino)pyrazolo[1,5-a]-1,3,5-triazin-8-yl]propionate.
3-[4-(N-Methyl-N-phenylamino)pyrazolo[1,5-a]-1,3,5-triazin-8-yl]propionic acid.
- 30 Methyl 4-[[1-oxo-3-[4-(N-methyl-N-phenylamino)pyrazolo-[1,5-a]-1,3,5-triazin-8-yl]propyl]amino]benzoate.
4-(Cyclopropylamino)-8-(2-fluorobenzoyl)-2-methylpyrazolo[1,5-a]-1,3,5-triazine.
- 35 Ethyl 4-(N-methyl-N-phenylamino)pyrazolo[1,5-a]-1,3,5-triazine-8-carboxylate.
tert-Butyl 3-[4-(N-methyl-N-phenylamino)pyrazolo-[1,5-a]-1,3,5-triazin-8-yl]acrylate.
tert-Butyl 3-[4-(N-methyl-N-phenylamino)pyrazolo-

- [1,5-*a*]-1,3,5-triazin-8-yl]propionate
4-(*N*-Methyl-*N*-phenylamino)-8-phenylpyrazolo[1,5-*a*]-
1,3,5-triazine.
4-(*N*-Methyl-*N*-phenylamino)-8-(β -D-glycero-pentofuran-
5 3'-ulos-1'-yl)pyrazolo[1,5-*a*]-1,3,5-triazine.
8-[(3-Furyl) (hydroxy)methyl]-4-(*N*-methyl-*N*-phenyl-
amino)-2-*n*-propylpyrazolo[1,5-*a*]-1,3,5-triazine.
8-(3-Furylmethyl)-2-*n*-propyl-4-(*N*-methyl-*N*-phenyl-
amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
10 2-Trifluoromethyl-8-(3-furylmethyl)-4-(cyclopropyl-
amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
2-Thiomethyl-8-(3-furylmethyl)-4-(*N*-methylamino)-
pyrazolo[1,5-*a*]-1,3,5-triazine.
8-(3-Furylmethyl)-4-(*N*-methylamino)-2-*n*-propylpyrazolo-
15 [1,5-*a*]-1,3,5-triazine.
2-Trifluoromethyl-8-cyclopentyl-4-(*N*-methylamino)-
pyrazolo[1,5-*a*]-1,3,5-triazine.
2-Pentafluoroethyl-8-(2-methoxybenzyl)-4-(*N*-methyl-
amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
20 4-(*N*-Cyclopropylamino)-2-trifluoromethyl-8-(2-methoxy-
benzyl)pyrazolo[1,5-*a*]-1,3,5-triazine.
4-(*N*-Cyclopropylamino)-8-(2-methoxybenzyl)-2-*n*-propyl-
pyrazolo[1,5-*a*]-1,3,5-triazine.
2-Iodo-8-(2-methoxybenzyl)-4-(*N*-methylamino)pyrazolo-
25 [1,5-*a*]-1,3,5-triazine.
2-Bromo-8-(2-methoxybenzyl)-4-(*N*-methylamino)pyrazolo-
[1,5-*a*]-1,3,5-triazine.
8-[(Hydroxy) (2-thienyl)methyl]-4-(*N*-methyl-*N*-phenyl-
amino)-2-*n*-propylpyrazolo[1,5-*a*]-1,3,5-triazine.
30 8-(2-Chlorobenzoyl)-2-trifluoromethyl-4-(*N*-methyl-
amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
8-(2-Chlorobenzoyl)-2-pentafluoroethyl-4-(*N*-methyl-
amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
8-(2-Chlorobenzoyl)-2-trifluoromethyl-4-(*N*-cyclopropyl-
35 amino)pyrazolo[1,5-*a*]-1,3,5-triazine.
4-(*N*-Methyl-*N*-phenylamino)-2-*n*-propyl-8-(2-thienyl-
methyl)pyrazolo[1,5-*a*]-1,3,5-triazine.
4-(*N*-Methylamino)-2-*n*-propyl-8-[(2-thienyl)methyl]-
pyrazolo[1,5-*a*]-1,3,5-triazine.

- 4-(*N*-Methylamino)-2-trifluoromethyl-8-[(2-thienyl)-methyl]pyrazolo[1,5-*a*]-1,3,5-triazine.
- 4-(*N*-Cyclopropylamino)-2-trifluoromethyl-8-[(2-thienyl)methyl]pyrazolo[1,5-*a*]-1,3,5-triazine.
- 5 *N*-[2-(3,4-Dihydroxyphenyl)ethyl]-3-[4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]-propionamide.
- 3-[4-(*N*-Methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]-*N*-[3-(2-oxopyrrolidin-1-yl)propyl]-propionamide.
- 10 *N*-[2-Hydroxy-2-(3,4-dihydroxyphenyl)ethyl]-3-[4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]propionamide.
- 3-(4-Oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propionic acid.
- 15 Ethyl 3-[4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]-acrylate.
- Sodium 4-[(hydroxy) [4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]methyl]benzoate.
- 20 Sodium 4-[[1-(oxo)-3-4-(oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propyl]amino]benzoate.
- Sodium 4-[2-(4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)-ethylsulfonylamino]benzoate.
- Sodium 4-[1-oxo-3-(2-amino-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propylamino]benzoate.
- 25 Sodium 4-[1-oxo-3-(2-*n*-propyl-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propylamino]benzoate.
- Sodium 4-[1-oxo-3-(2-trifluoromethyl-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propylamino]benzoate.
- 30 *N*-[2-(Indol-3-yl)ethyl]-3-(4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- N*-[2-(Indol-3-yl)ethyl]-3-(2-amino-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- N-[1-(Carboxyl)-2-(indol-3-yl)ethyl]-3-(4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- 35 *N*-[2-(4-Hydroxyphenyl)ethyl]-3-(4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- N*-[2-(4-Hydroxyphenyl)ethyl]-3-(2-amino-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.

- N*-[2-(4-Hydroxyphenyl)ethyl]-3-(2-trifluoromethyl-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- N*-[1-(Carboxyl)-2-(4-hydroxyphenyl)ethyl]-3-(4-oxo-pyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)propanamide.
- 5 4-(*N*-Methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 2-(4-Methylbenzyl)-8-(2-oxohept-3-yl)pyrazolo[1,5-*a*]-1,3,5-triazin-4-one.
- 8-(2-Hydroxy-6-phenylhex-3-yl)-2-(3,4-dimethoxybenzyl)pyrazolo[1,5-*a*]-1,3,5-triazin-4-one.
- 10 Erythro-8-(2-hydroxy-3-nonyl)pyrazolo[1,5-*a*]-1,3,5-triazin-4-one.
- Erythro-4-amino-8-(2-hydroxy-3-nonyl)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 15 Sodium 4-[[3-(1-methyl-4-oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl)-1-(oxo)propyl]amino]benzoate.
- 8-Benzoyl-2-cyclopropylpyrazolo[1,5-*a*]-1,3,5-triazin-4-one.
- N*-[2-(3,4-Dihydroxyphenyl)ethyl]-3-(4-oxopyrazolo-[1,5-*a*]-1,3,5-triazin-8-yl)propionamide.
- 20 3-[4-Oxopyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]-*N*-[3-(2-oxopyrrolidin-1-yl)propyl]propionamide.
- N*-[2-Hydroxy-2-(3,4-dihydroxyphenyl)ethyl]-3-[4-oxo-pyrazolo[1,5-*a*]-1,3,5-triazin-8-yl]propionamide.
- 25 8-(2'-Deoxy- β -D-ribofuranosyl)-4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 8-(2'-Deoxy- β -D-ribofuranosyl)-4-[*N*-methyl-*N*-(4-nitro-phenylamino)]pyrazolo[1,5-*a*]-1,3,5-triazine.
- 8-(2'-Deoxy- β -D-xylofuranosyl)-4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 30 8-(2'-Deoxy- β -D-xylofuranosyl)-4-[*N*-methyl-*N*-(4-nitro-phenylamino)]pyrazolo[1,5-*a*]-1,3,5-triazine.
- 4-Amino-8-(2'-deoxy- β -D-ribofuranosyl)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 35 8-(2'-Deoxy- β -D-ribofuranosyl)pyrazolo[1,5-*a*]-1,3,5-triazin-4-one.
- 4-Amino-8-(2'-deoxy- β -D-xylofuranosyl)pyrazolo[1,5-*a*]-1,3,5-triazine.
- 8-(2'-Deoxy- β -D-xylofuranosyl)pyrazolo[1,5-*a*]-1,3,5-

- triazin-4-one.
- 4-Amino-2-fluoro-8-[*trans*-2, *trans*-3-dihydroxy-4-(hydroxymethyl)cyclopent-4-enyl]pyrazolo[1,5-a]-1,3,5-triazine.
- 5 4-Amino-8-[*trans*-2, *trans*-3-dihydroxy-4-(hydroxymethyl)-cyclopent-4-enyl]pyrazolo[1,5-a]-1,3,5-triazine.
- 2-Fluoro-8-[*trans*-2, *trans*-3-dihydroxy-4-(hydroxymethyl)cyclopent-4-enyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 10 8-[*trans*-2, *trans*-3-dihydroxy-4-(hydroxymethyl)-cyclopent-4-enyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- (1*S*, 4*R*)-2-Amino-4-(cyclopropylamino)-8-[4-(hydroxymethyl)cyclopent-2-en-1-yl]pyrazolo[1,5-a]-1,3,5-triazine.
- 15 *cis*-2-Amino-4-(cyclopropylamino)-8-[4-(hydroxymethyl)-cyclopent-2-en-1-yl]pyrazolo[1,5-a]-1,3,5-triazine.
- 4-Amino-7-chloro-8-(β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazine-3',5'-cyclophosphate.
- bis-(2,2,2-Trifluoroethyl [2-[2-amino-4-(4-methoxy-
- 20 phenylthio)pyrazolo[1,5-a]-1,3,5-triazin-8-yl]ethoxy]-methylphosphonate.
- 4-Amino-8-(3'-deoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazine.
- 8-(3'-Deoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 25 2-Amino-8-(3'-deoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 4-Amino-2-chloro-8-(2'-deoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazine.
- 30 *cis*-2-Amino-4-(cyclopropylamino)-8-[2-(hydroxymethyl)-1,3-dioxolan-4-yl]pyrazolo[1,5-a]-1,3,5-triazine.
- 4-Amino-8-(2', 3'-dideoxy-2'-fluoro- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazine.
- 4-Amino-8-(2', 3'-dideoxy-2'-fluoroarabinosyl)pyrazolo-
- 35 [1,5-a]-1,3,5-triazine.
- 2-Amino-8-[4-acetyloxy-3-(acetyloxymethyl)butyl]pyrazolo[1,5-a]-1,3,5-triazine.
- 4-Amino-2-chloro-8-(2'-deoxy-2'-fluoro- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazine.

- 4-Amino-8-(2'-deoxy-2'-fluoro- β -D-ribofuranosyl)-pyrazolo[1,5-a]-1,3,5-triazine.
- 8-(2'-Deoxy-2'-fluoro- β -D-ribofuranosyl)pyrazolo-[1,5-a]-1,3,5-triazin-4-one.
- 5 S-[[4-Amino-8-(5'-deoxy- β -D-ribofuranosyl)pyrazolo-[1,5-a]-1,3,5-triazine]-5'-yl]methionine (bioisostere of S-adenosylmethionine).
- 2-Amino-4-[(4-bromo-2-thienyl)methoxy]pyrazolo[1,5-a]-1,3,5-triazine.
- 10 (R)-4-Benzylamino-2-[1-(hydroxymethyl)propylamino]-8-isopropylpyrazolo[1,5-a]-1,3,5-triazine.
- (S)-4-Benzylamino-2-[1-(hydroxymethyl)propylamino]-8-isopropylpyrazolo[1,5-a]-1,3,5-triazine.
- 2'-(Butyryl)-4-(N-butyrylamino)-8-(β -D-ribofuranosyl)-pyrazolo[1,5-a]-1,3,5-triazine-3',5'-cyclophosphate.
- 15 cis-2,4-Diamino-8-[2-(hydroxymethyl)-1,3-dioxolan-4-yl]pyrazolo[1,5-a]-1,3,5-triazine.
- cis-2-Amino-8-[2-(hydroxymethyl)-1,3-dioxolan-4-yl]-pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 20 cis-8-[2-(Hydroxymethyl)-1,3-dioxolan-4-yl]pyrazolo-[1,5-a]-1,3,5-triazin-4-one.
- cis-4-Amino-8-[2-(hydroxymethyl)-1,3-dioxolan-4-yl]-pyrazolo[1,5-a]-1,3,5-triazine.
- (1'S,2'R)-2-Amino-8-[[1',2'-bis(hydroxymethyl)cyclo-25 prop-1'-yl]methyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- (1'S,2'R)-8-[[1',2'-bis(Hydroxymethyl)cycloprop-1'-yl]-methyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- (1'S,2'R)-4-Amino-8-[[1',2'-bis(hydroxymethyl)cyclo-30 prop-1'-yl]methyl]pyrazolo[1,5-a]-1,3,5-triazine.
- 2-Amino-8-[(2-hydroxyethoxy)methyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 35 8-[(2-Hydroxyethoxy)methyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 4-Amino-8-[(2-hydroxyethoxy)methyl]pyrazolo[1,5-a]-1,3,5-triazine.
- 2-Amino-8-[4-hydroxy-3-(hydroxymethyl)butyl]pyrazolo-[1,5-a]-1,3,5-triazin-4-one.
- 4-Amino-8-[4-hydroxy-3-(hydroxymethyl)butyl]pyrazolo-[1,5-a]-1,3,5-triazine.

- 8-[4-Hydroxy-3-(hydroxymethyl)butyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 2-Amino-8-[2-hydroxy-1-(hydroxymethyl)ethoxymethyl]-pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 5 8-[2-Hydroxy-1-(hydroxymethyl)ethoxymethyl]pyrazolo-[1,5-a]-1,3,5-triazin-4-one.
- 4-Amino-8-[2-hydroxy-1-(hydroxymethyl)ethoxymethyl]-pyrazolo[1,5-a]-1,3,5-triazine.
- 2-[(2-Amino-4-oxopyrazolo[1,5-a]-1,3,5-triazin-8-
10 yl)methoxy]ethyl valinate.
- 8-(2',3'-Dideoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 8-(2',3'-Dideoxy-2',2'-difluoro- β -D-ribofuranosyl)-pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 15 8-(2'-Deoxy- β -D-ribofuranosyl)pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- bis(Pivaloyloxyethyl) [2-(4-aminopyrazolo[1,5-a]-1,3,5-triazin-8-yl)ethoxy]methylphosphonate.
- Sodium [2-(4-aminopyrazolo[1,5-a]-1,3,5-triazin-8-yl)-
20 ethoxy]methylphosphonate.
- 4-Amino-8-[2-[bis(pivaloyloxyethyl)phosphonyl]-methoxy]ethyl]pyrazolo[1,5-a]-1,3,5-triazine.
- cis-8-[2-(Hydroxymethyl)-1,3-oxathiolan-5-yl]pyrazolo-[1,5-a]-1,3,5-triazin-4-one.
- 25 cis-8-[2-(Hydroxymethyl)-1,3-oxathiolan-5-yl]-2-oxo-pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- cis-8-[2-(Hydroxymethyl)-1,3-oxathiolan-5-yl]-2-thioxo-pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- cis-2-Amino-8-[2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-
30 pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- cis-4-Amino-8-[2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-pyrazolo[1,5-a]-1,3,5-triazine.
- 8-[[3R,4R)-3-Hydroxy-4-(hydroxymethyl)pyrrolidin-1-yl]-methyl]pyrazolo[1,5-a]-1,3,5-triazin-4-one.
- 35 4-Amino-8-[(3R,4R)-3-hydroxy-4-(hydroxymethyl)-pyrrolidin-1-yl)methyl]pyrazolo[1,5-a]-1,3,5-triazine.

12. The use of the compounds as claimed in any one of claims 1 to 11, as a medicinal product intended to

treat or prevent pathologies involving neuronal degeneration, in particular aging, senility, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, multiple scleroses, Huntington's 5 disease, Down's syndrome, cerebral strokes, peripheral neuropathies, retinopathies (in particular pigmentary retinitis), prion diseases (in particular spongiform encephalopathies of the Creutzfeldt-Jakob disease type), traumas (accidents to the vertebral column, 10 compression of the optic nerve subsequent to a glaucoma, etc.), or else neuronal disorders caused by the action of chemical products and nerve lesions, comprising the administration to this mammal of an effective amount of a compound as claimed in any one of 15 claims 1 to 11.

13. The use of a compound as claimed in any one of claims 1 to 11, for preparing a medicinal product intended to increase intracellular levels of cGMP 20 through inhibition of a phosphodiesterase or of heme oxygenase, for treating or preventing, in a mammal, central or peripheral diseases, comprising the administration to this mammal of an effective amount of a compound as claimed in any one of claims 1 to 11.

25 14. The use of a compound as claimed in any one of claims 1 to 11, for preparing a medicinal product intended to inhibit a phosphodiesterase type 2 or 4, for treating or preventing, in a mammal, central or 30 peripheral diseases chosen from inflammatory diseases, chronic obstructive bronchopathies, rhinitis, dementia, acute respiratory distress syndrome, allergies, dermatitis, psoriasis, rheumatoid arthritis, infections (in particular viral infections), autoimmune diseases, 35 multiple scleroses (in particular multiple sclerosis), dyskinesias, glomerulonephritis, osteoarthritis, cancer, septic shock, AIDS, Crohn's disease, osteoporosis, rheumatoid arthritis, obesity, depression, anxiety, schizophrenia, bipolar disorder, attention

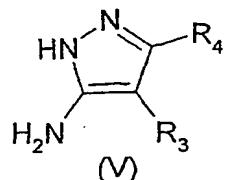
deficits, fibromyalgia, Parkinson's disease and Alzheimer's disease, diabetes, amyotrophic sclerosis, multiple scleroses, Lewy body dementias, conditions with spasms such as epilepsy, fibromyalgia, central nervous system pathologies associated with senescence, memory disorders, and other psychiatric disorders, comprising the administration to this mammal of an effective amount of a compound as claimed in any one of claims 1 to 11.

10

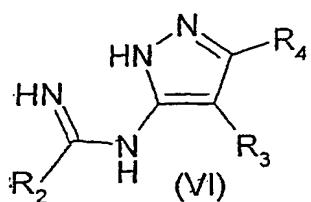
15. The use of the compounds as claimed in any one of claims 1 to 8, as a medicinal product, in particular as antimicrobial, antiviral or anticancer medicinal products, or else medicinal products having cardiovascular effects.

16. A pharmaceutical composition comprising at least one compound as claimed in any one of claims 1 to 11, combined with a pharmaceutically acceptable vehicle or 20 excipient.

17. A method for preparing a compound of formulae (Ia) or (Ib) as claimed in claim 3, in which $R_1=H$, characterized in that it comprises the following steps:
25 a) reaction of a compound of general formula (V)

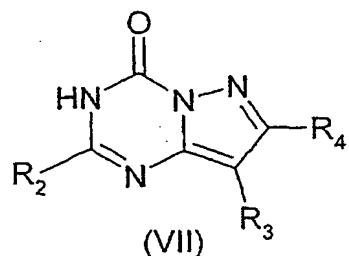


in which R_3 and R_4 are as defined in claim 3, with a compound a group of formula $R_2C(GP)=NH$, in which R_2 is as defined in claim 3 and GP represents a leaving group, so as to obtain a compound of formula (VI)

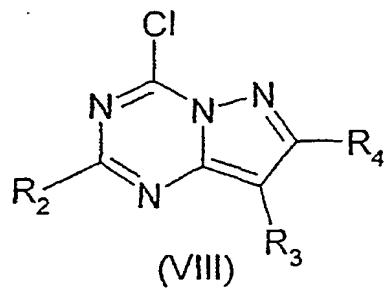


b) reaction of the compound of formula (VI) with a dielectrophile so as to obtain a compound of formula (Ia) or (Ib).

5 18. The method as claimed in claim 17, characterized in that, during step a), the compound of formula (V) is reacted with an imidate of formula $R_2(OMe)=NH \cdot HCl$ and, during step b), the compound obtained in a) is reacted with an ethyl carbonate so as to obtain a compound of
10 formula (VII)



which can optionally be reacted with phosphorus oxychloride and a tertiary amine so as to obtain a compound of formula (VIII)



15 which can, if desired, be reacted with an amine of formula HNR_xR_y so as to obtain a compound of formula (Ib) in which $Y=NR_xR_y$.

20 19. The method as claimed in claim 18, characterized in that, when Y represents an *N*-methyl-*N*-phenylamino group, then the compound (Ib) is treated with a hydroxide so as to obtain a compound of formula (Ib) in which $Y=OH$.

25 20. The use of the following compounds:
8-(1-hydroxypropyl)-2-methyl-4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine, ethyl 2-methyl-4-

(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine-6-carboxylate, 2-methyl-4-(*N*-methyl-*N*-phenylamino)-8-phenylpyrazolo[1,5-*a*]-1,3,5-triazine, 2-methyl-4-(*N*-methylamino)-8-(prop-1-ynyl)pyrazolo[1,5-*a*]-1,3,5-

5 triazine, 2-methyl-4-(*N*-methyl-*N*-phenylamino)-8-(β -D-glycero-pentofuran-3'-ulos-1'-yl)pyrazolo[1,5-*a*]-1,3,5-triazine, 2-methyl-4-(methylamino)pyrazolo[1,5-*a*]-1,3,5-triazine, 2-methyl-4-[4-(*N,N*-dimethylamino-phenyl)pyrazolo[1,5-*a*]-1,3,5-triazine, pyrazolo[1,5-*a*]-1,3,5-triazin-4-one, 2-methylpyrazolo[1,5-*a*]-1,3,5-triazin-4-one, 2-thioxo-1,2,3,4-tetrahydro-pyrazolo[1,5-*a*]-1,3,5-triazin-4-one, 2-thiomethyl-pyrazolo[1,5-*a*]-1,3,5-triazin-4-one, 2-methyl-4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine,

10 2-methyl-4-[*N*-methyl-*N*-(4-nitrophenyl)amino]-8-nitro-pyrazolo[1,5-*a*]-1,3,5-triazine, 8-amino-4-[*N*-(4-amino-phenyl)-*N*-methylamino]-2-methylpyrazolo[1,5-*a*]-1,3,5-triazine, 8-acetamido-4-[*N*-(4-acetamidophenyl)-*N*-methylamino]-2-methylpyrazolo[1,5-*a*]-1,3,5-triazine,

15 20 8-iodo-2-methyl-4-(*N*-methyl-*N*-phenylamino)pyrazolo-[1,5-*a*]-1,3,5-triazine, 8-[(hydroxy)(phenyl)methyl]-2-methyl-4-(*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine, 8-benzyl-2-methyl-4-(*N*-methyl-*N*-phenylamino)-pyrazolo[1,5-*a*]-1,3,5-triazine, 8-benzoyl-2-methyl-4-

25 (25) (*N*-methyl-*N*-phenylamino)pyrazolo[1,5-*a*]-1,3,5-triazine, *N,N*-diethyl-2-methyl-4-(*N*-methyl-*N*-phenylamino)-pyrazolo[1,5-*a*]-1,3,5-triazine-6-carboxamide, 8-benzyl-2-methylpyrazolo[1,5-*a*]-1,3,5-triazin-4-one and 8-benzoyl-2-methylpyrazolo[1,5-*a*]-1,3,5-triazin-4-one,

30 for preparing a medicinal product intended to increase the secretion of one or more neurotrophic factors for treating or preventing pathologies involving neuronal degeneration.